UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET—SUITE 500
DENVER, COLORADO 80202-2405

REFER TO
Area Mgr
Krueger

JUN 2 [illegible]

Mr. John Krueger
DOE, Rocky Flats Plant
P.O. Box 928
Golden, CO 80402

Dear John:

I am enclosing a summary of the comments compiled by Gordon McCurry of EPA's contractor, Camp, Dresser, and McKee, during the inspection conducted by EPA's National Enforcement Investigations Center. Gordon was present to review Rockwell's groundwater sampling procedures.

Please consider these comments as the data collection effort continues for the priority sites.

Sincerely,

Barry

Barry F. Levene

Enclosures

cc: Fred Dowsett, CDH
Gordon McCurry, CDM

Tom —

These look like good comments to me. Please consider them, and we'll talk about them when I get back.

John Krueger

6-11

"REVIEWED FOR CLASSIFICATION"
By [signature]
Date 6/9/90"

ADMIN RECORD

General Comments

1. The field activities undertaken by Rockwell International staff were much improved in terms of adequacy and appropriateness, given site conditions, compared to similar activities observed at RFP during previous oversight trips. Specific improvements include the use of pre-cleaned ICHEM bottles and not rinsing the bottles with sample water prior to filling.

2. Health and safety precautions were seriously lacking in one regard. Although the protective clothing worn by the Rockwell field team was suitable, at no time did they monitor organic vapor concentrations in the air near a wellhead. When asked why they did not take HnU or OVA readings, the field team responded that they know what the organic (and radioactive) concentrations are in the water at each well based on previous sampling results. The sampling team's knowledge of ground water quality at a site, based on previous sampling results, does not constitute adequate knowledge about downhole organic vapors that may be present when the well is sampled next. Contaminant plumes migrate, concentrations change and volatilization of volatile organic compounds present in ground water near a well can change the organic vapor concentrations in the headspace of a well drastically between sampling periods. As a matter of sampling team safety, it is strongly recommended that HnU or OVA readings be taken at the start of, and periodically throughout well purging and sampling activities.

3. Decontamination procedures used for the bailer (Alconox wash followed by deionized water rinse) may not be adequate to prevent cross-contamination between wells. This is particularly relevant where oil or grease may be present in the ground water. As an example, an oil sheen was visible on the water surface inside alluvial well 9-74 prior to bailing and a distinctive fuel smell was noticed. The bailer used to purge this well was then used, after the standard decontamination process, to collect ground water samples at well 62-86. The sampling results from well 62-86, or from other wells under similar circumstances, may be inaccurate due to potential cross-contamination. A chemical rinse between the Alconox wash and the deionized water rinse would ensure removal of all organic compounds that may exist on the bailer or any other downhole equipment.

4. The Rockwell field team indicated that no decontamination/rinsate blanks are collected. Decontamination/rinsate blanks are sample bottles filled with deionized water that has passed through equipment such as a bailer, which has been decontaminated. The purpose of these samples, collected at a specified frequency and sent in for analysis with the other samples, is to verify the adequacy of the field decontamination procedures. Since this field quality assurance procedure is not undertaken there is no way to know whether the existing decontamination procedures are adequate or if potential cross-contamination is occurring. It is recommended that future sampling events include the collection of decontamination/rinsate blanks on a frequency of at least one per twenty field samples.